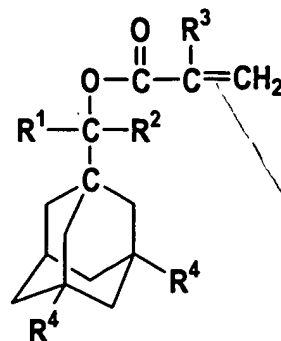


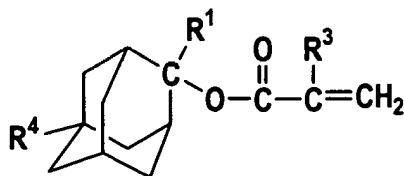
(1a-1)



(1a-2)

wherein R^1 represents a hydrogen atom, an alkyl group or a cycloalkyl group; R^2 represents an alkyl group or a cycloalkyl group; R^3 represents a hydrogen atom or a methyl group; R^4 represents an oxygen-containing group, and in formula (1a-2), the two R^4 substituents may be the same as or different from one another; and R^1 and R^2 may, jointly and together with adjacent carbon atom, form an alicyclic hydrocarbon ring,

or by the following formula (2a-1)



(2a-1)

wherein R^1 represents an alkyl group or a cycloalkyl group; R^3 represents a hydrogen atom or a methyl group; and R^4 represents an oxygen-containing group,

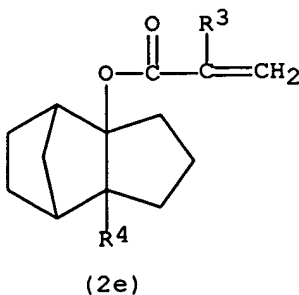
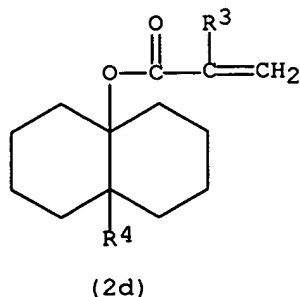
wherein the oxygen-containing group R^4 in formulae (1a-1), (1a-2), and (2a-1) is selected from the group consisting of hydroxyl groups, alkoxy groups,

g1
 carboxyl groups, alkoxycarbonyl groups, cycloalkyloxycarbonyl groups, aryloxycarbonyl groups, aralkyloxycarbonyl groups, hydroxymethyl groups, carbamoyl groups, N-substituted carbamoyl groups, and nitro groups.

g2
 2. (twice amended) The acid-responsive compound according to Claim 1 having the formula (1a-1) or (1a-2), wherein R¹ is a hydrogen atom and R² is a straight-chain or branched-chain C₁₋₄alkyl group.

g3
 8. (twice amended) The acid-responsive compound according to Claim 1, wherein R¹ in formulae (1a-1) and (1a-2) is a hydrogen atom or a straight-chain or branched-chain C₁₋₄ alkyl group, and R¹ in formula (2a-1) is a straight-chain or branched-chain C₁₋₄ alkyl group; and R² is a straight-chain or branched-chain C₁₋₄ alkyl group.

9. (unamended) An acid-responsive compound represented by the following formula (2d) or (2e):



wherein R³ represents a hydrogen atom or a methyl group; R⁴ represents an oxygen-containing group selected from the group consisting of oxo groups, hydroxyl groups, alkoxy groups, carboxyl groups, alkoxycarbonyl groups, cycloalkyloxycarbonyl groups, aryloxycarbonyl groups, aralkyloxycarbonyl groups, hydroxymethyl groups, carbamoyl groups, N-substituted carbamoyl groups, and nitro groups.

34 10. (twice amended) A photoresist resin composition comprising

(i) a polymer having at least one unit corresponding to the acid-responsive compound of formula (1a-1), (1a-2), or (2a-1) as defined in Claim 1 or of formula (2d) or (2e) as defined in Claim 9 and

(ii) a photoactive acid precursor.

12. (*unamended*) The photoresist resin composition according to Claim 10, which contains 0.1 to 30 parts by weight of the photoactive acid precursor (ii) relative to 100 parts by weight of the polymer (i).

35 13. (twice amended) The photoresist resin composition according to Claim 10, wherein the polymer is a copolymer.

14. (twice amended) A method of forming a pattern, which method comprises
subjecting a layer comprising the photoresist resin composition of Claim 10 formed on a substrate to pattern exposure and
developing the exposed coating layer to form a pattern.

15. (new) The acid-responsive compound of claim 1, having the formula (1a-1) in which R¹ is isopropyl, R² is methyl, R³ is hydrogen, and R⁴ is hydroxy, namely, 1-hydroxy-3-(1-acryloyloxy-1,2-dimethylpropyl)adamantine.

16. (new) The acid-responsive compound of claim 9, having the formula (2e) in which R³ is hydrogen and R⁴ is hydroxy, namely, 2-hydroxy-6-acryloyloxy-tricyclo[5.2.1.0^{2,6}]decane.
